

Flexible RF cable

RG_174_A/U Item: 22511579

Description

RG: RG type RF cables

RG174, 50 Ohm, 1 GHz, 85°C, ø2.8 mm, PVC jacket



Technical Data

Construction

	Material	Detail	Diameter
Centre conductor	Steel, Copper plated	Strand-07	0.48 mm
Dielectric	PE (Polyethylene)		1.48 mm
Outer conductor	Copper, Tin plated	Braid, 87%	2 mm
Jacket	PVC II (low migration)	RAL 9005 - bk	2.8 mm +/- 0.12

Print: HUBER+SUHNER RG 174 A/U 50 Ohm (production order number)

Electrical Data

Impedance	50 Ω +/- 2
Operating Frequency	1 GHz
Capacitance	101 pF/m
Velocity of signal propagation	66 %
Signal delay	5.03 ns/m
Screening effectiveness	≥ 40 dB (up to 1 GHz)
Operating voltage	≤ 1.5 kV _{rms} (at sea level)
Test voltage	3 kV _{rms} (50 Hz/1 min)

Mechanical Data

Weight		1.2 kg/100 m
Min. bending radius	static	15 mm
		28 mm
	dynamic	55 mm

Environmental Data

Temperature range	-25 °C ... +85 °C
Installation temperature	-20 °C... +60 °C
Halogen free	No
2011/65/EU (RoHS - including 2015/863 and 2017/2102)	compliant
1907/2006/EC (REACH)	compliant

Additional Information

MIL reference: M17/196-00001 (former reference: M17/119-RG174)

Remarks

(For details refer to the HUBER+SUHNER RF CABLES GENERAL CATALOGUE or contact your nearest HUBER+SUHNER partner)

Suitable Connectors

Cable group	U2 2 mm / 50 Ohm
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Matrix typical Attenuation [formula: $(a \cdot f^{0.5} + b \cdot f)$] and maximum Power CW [formula: $(p/f^{0.5})$]

Coefficients:

a = 0.888

b = 0.034

f_{max} = 1

P at 1GHz = 37

Frequency (GHz)	Nom. attenuation (dB / m) sea level 25° C ambient temperature	Nom. attenuation (dB / ft) sea level 25° C ambient temperature	Max. CW power (W) sea level 40° C ambient temperature
0,05	0,2	0,061	165
0,1	0,28	0,087	117
0,15	0,35	0,106	96
0,2	0,4	0,123	83
0,25	0,45	0,138	74
0,3	0,5	0,151	68
0,35	0,54	0,164	63
0,4	0,58	0,175	59
0,45	0,61	0,186	55
0,5	0,64	0,197	52
0,55	0,68	0,206	50
0,6	0,71	0,216	48
0,65	0,74	0,225	46
0,7	0,77	0,234	44
0,75	0,79	0,242	43
0,8	0,82	0,250	41
0,85	0,85	0,258	40
0,9	0,87	0,266	39
0,95	0,9	0,274	38
1,0	0,92	0,281	37